DOCUMENT RESUME

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IDENTIFIERS	Cement Masons; *Drywall Construction; *Plasterers; Preapprenticeship Programs

ABSTRACT

This self-paced student training module on introduction to the trowel trades is part of the course, Trowel Trades, which was developed for Preapprenticeship Phase 1 Training. (A companion instructor's guide is available separately as CE 032 868.) The course is designed to provide students with an orientation to the trade and an opportunity to explore it. The purpose of the module is to provide an introduction to the trowel trades, including history, trends, working conditions, hiring practices, training, employment opportunities, and wage scale of the trowel trades. The module may contain some or all of the following: a cover sheet listing module title, goal, and performance indicator; study guide/checklist with directions for module completion; introduction; information sheets providing information and graphics covering the module topic(s); supplementary references; self-assessment; self-assessment answers; post assessment; and post-assessment answers. (YLB)

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INDIVIDUALIZED LEARNING SYSTEMS

PRE-APPRENTICESHIP PHASE 1 TRAINING

INTRODUCTION TO THE TROWEL TRADES

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Goal:

The student will be able to identify and briefly describe the history, trends, working conditions, palces of employment, hiring practices and wage scale of the trowel trades.

Performance Indicators:

The student will demonstrate knowledge of the material by successfully completing a Self Assessment and a Post Assessment exam.

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Information

HISTORY

asonry is the craft of building with stone. The remains of the Egyptian pyramids and huge temples remind us that a great deal of skill in masonry had already been developed in ancient times. For example, the masonry joints in the great pyramid Khufu are less than 1/100-inch thick, and some of the stones weigh up to 60 tons. 100,000 laborers worked continuously for more than twenty years on the pyramid's construction.

The Greeks attained a high standard of masonry and they developed Doric, Ionic and Corinthian architecture. The Romans copied the Greek forms but they used stone for surface, nonconstructional treatment. When the Romans invaded Britain the spirit of building began again. Masonry was discontinued for about the next 200 years until masons from Italy and France came to England to re-establish the craft. During the 14th and 15th centuries beautiful cathedrals were built. That work demanded the supreme skill of the masons of that time.

After the 15th century, stone was used extensively as a building material. The introduction of brick production reduced the demand for stonework. Brick is still used in solid-wall construction. Stone became an ornamental veneer, with steel or reinforced concrete forming the frame of a building.

Today a great deal of a mason's preparation work can be done by machinery. Skilled masons are still in demand, for repair and maintenance work on historical buildings, as well as new residential and commercial construction.

TRENDS

Employment for trowel trades workers is expected to increase rapidly throughout the 1980s. As the pupulation and economy grow, masons will be needed to build apartments, offices, highways and other structures. There is also a greater use

of concrete as a building material. New products, such as epoxy and latex flooring systems, will stimulate the demand for cement masons. The permanence, durability and thermal values of masonry will increase its use.

WORKING CONDITIONS

Masonry work is active and strenuous. Most of the cement finishing is done at ground level; other trowel trades work is done on scaffolds or stilts. Workers must often stoop and kneel. Work slows down during rain or freezing weather.

PLACES OF EMPLOYMENT

The majority of workers worked for general contractors who construct entire projects, and for contractors that do only masonry work. Some masons work for specialty floor contractors or are employed by public agencies and manufacturing firms that do their own construction work.

HIRING PRACTICES

Employers prefer to hire high school graduates who are 18-years old, in good physical condition and licensed to drive. The ability to work as a team member and to direct others are also important assets. High school courses in shop mathematics, blueprint reading or mechanical drawing provides a helpful background.

WAGE SCALE

Trowel trades journeymen-level workers in the northwest currently make as much as $13 an hour. Union masons usually make a little more than nonunion masons. Apprentices often begin at 50 to 60 percent of the rate paid to journeymen in the trade.

Annual earnings might not be as high as the hourly rates would indicate because poor weather and fluctuating construction conditions lead to unstable employment.

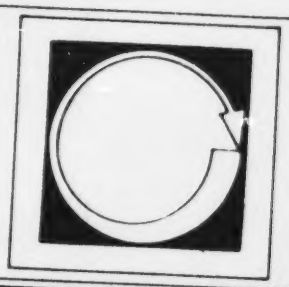
Supplementary References

David R. Turner, Cement Mason-Mason's Helper, Arco Publishing Co., 1975

Encyclopedia Britannica, Volume 14, William Benton, Publisher, 1972

Occupational Outlook Handbook, 1980-81 Edition, U.S. Department of Labor, March, 1980, Bureau of Labor Statistics

Self Assessment



Complete each statement by writing the appropriate word or phrase in the blank provided.

1. Masonry is the craft of building with _____.

2. The Egyptian pyramids are evidence of the ancient development of _____.

3. Today a great deal of the mason's preparation work can be done by _____.

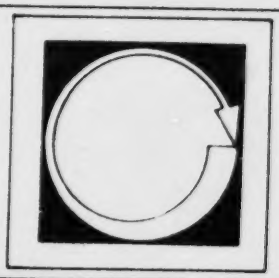
4. Skilled masons are in demand for _____ and _____ on historical buildings.

5. Employers prefer to hire workers who are _____ years old.

Self Assessment Answers

1. stone
2. masonry
3. machinery
4. repair, maintenance
5. eighteen

Post Assessment



Select the word or words which correctly answers the question or completes the statement and write its corresponding letter in the blank space provided.

1. ____ How many laborers are belived to have worked on the pyramid of Khufer?
   a. 10,000
   b. 100,000
   c. 500,000
   d. 50,000

2. ____ As population and economy grow, masons will be needed to build what structures?
   a. apartments
   b. offices
   c. highways
   d. all of the above

3. ____ Masonry work is considered
   a. active and strenuous
   b. warm and comfortable
   c. wet and cold

Complete the following by writing a T if the statement is true, and F if the statement is false.

4. ____ Non-union masons usually make more money than union masons do.

5. ____ Apprentices may make up to 60% more than skilled workers.

6. ____ Poor weather and fluctuating construction conditions do not affect the employment rate.

Instructor Post Assessment Answers

1. b
2. d
3. a
4. F
5. F
6. F